

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
30 October 2003 (30.10.2003)

PCT

(10) International Publication Number
WO 03/089137 A1

(51) International Patent Classification⁷: **B01L 3/00, 7/00**

(21) International Application Number: **PCT/EP03/50115**

(22) International Filing Date: **17 April 2003 (17.04.2003)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:
02076728.1 19 April 2002 (19.04.2002) EP
60/397,478 19 July 2002 (19.07.2002) US

(71) Applicant (for all designated States except US): **PAM-GENE B.V. [NL/NL]**; Burgemeester Loeffplein 70a, NL-5211 RX 's-Hertogenbosch (NL).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BLOK, Herman, Jacobus [NL/BE]**; Molenpad 69, B-2275 Gierle (BE). **VAN BEUNINGEN, Marinus, Gerardus, Johannes [NL/NL]**; Polderkade 27, NL-5345 RR Oss (NL).

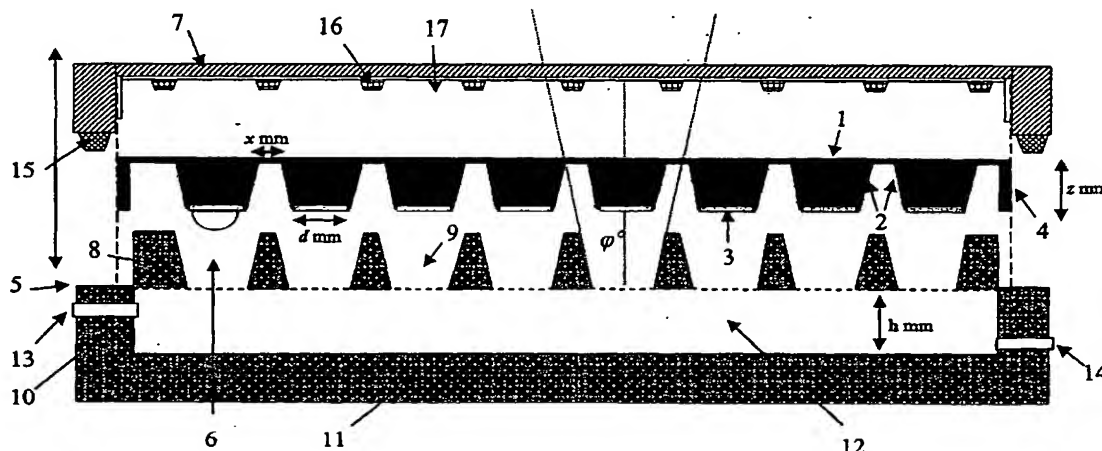
(74) Agent: **DE VRIES, Johannes, Hendrik, Fokke; De Vries & Metman**, Overschiestraat 180, NL-1062 XK Amsterdam (NL).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **SYSTEM, SUBSTRATE PLATE AND INCUBATION DEVICE FOR CONDUCTING BIOSAYS**



(57) Abstract: A system for conducting bioassays comprises a substrate plate with wells, and an incubation device for holding the plate. The substrate plate comprises a microplate with an array of wells arranged in rows and columns, wherein the bottom of each well is a microarray substrate having oriented flow-through channels. The incubation device comprises an incubation chamber for holding the microplate and a cover for sealing the incubation chamber. The incubation device has a heat block with array of openings, each opening adapted to receive a well of the microplate. A sealing gasket is provided for individually sealing each well of the microplate.